## West const vs. East const -

# Core Guidelines vs. Logic

### Wolfram Rösler

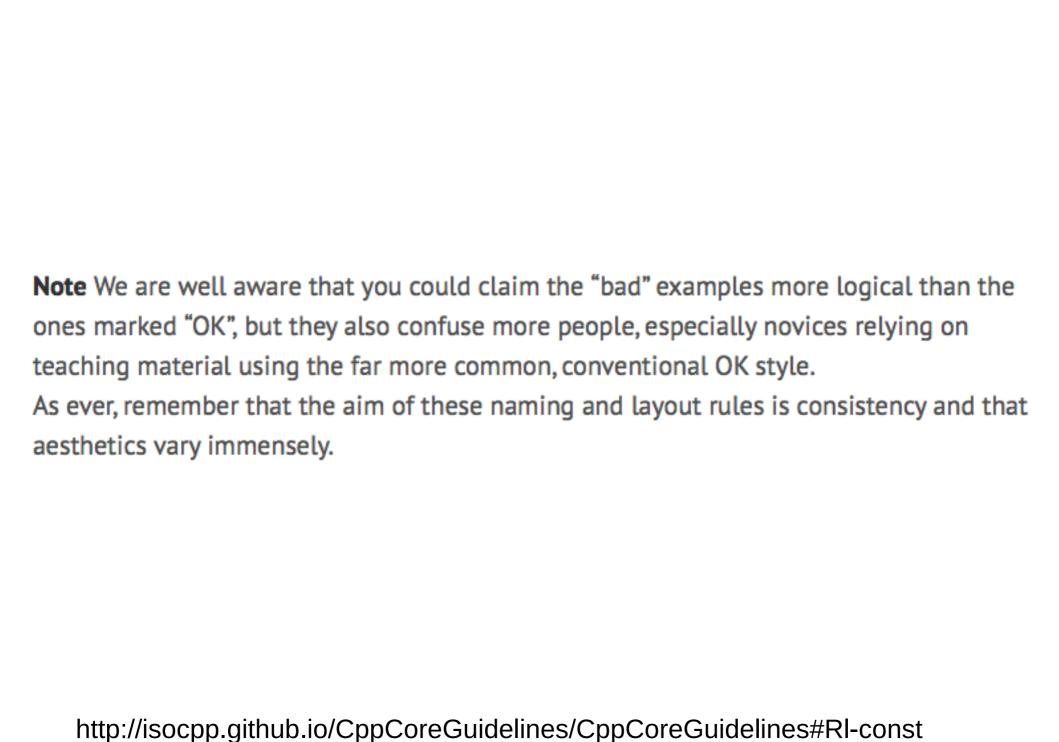
```
// "West const"
const int w = 0;
```

```
// "East const"
int const e = 0;
```

#### NL.26: Use conventional const notation

**Reason** Conventional notation is more familiar to more programmers. Consistency in large code bases.

#### Example



```
// "West const"
const int w = 0;

// "East const"
int const e = 0;
```

```
int x;
// "West const"
const int & w = x;
// "East const"
int const& e = x;
```

```
int x;
// "West const"
const int* const w = &x;
// "East const"
int const* const e = &x;
```

```
int x;
```

```
// "West const"
const int *const w = &x;
```

Another case of Core Guidelines vs. Logic ("NL.18: Use C++-style declarator layout")

```
class C {
 // "West const"
 const int* w() const;
 // "East const"
 int const* e() const;
};
```

```
typedef int* intptr;
int x;
// "West const"
                         // "East const"
const intptr p=&x;
                         intptr const p=&x;
                         int* const q=&x;
int* const q=&x;
const int* r=&x;
                         int const* r=&x;
// p and q have identical types (are const),
// r is different (*r is const, r is not)
```

## Resources

- C++ Core Guidelines

  http://isocpp.github.io/CppCoreGuidelines/CppCoreGuidelines
- Bjarne Stroustrup's C++ Style/Technique FAQ http://www.stroustrup.com/bs\_faq2.html#constplacement
- Stack Overflow Discussions

https://stackoverflow.com/questions/5503352/https://stackoverflow.com/questions/1143262/https://stackoverflow.com/questions/988069/

- const T vs. T const http://www.dansaks.com/articles/1999-02%20const%20T%20vs%20T%20const.pdf
- A foolish consistency ... http://slashslash.info/2018/02/a-foolish-consistency/